

AVESF
8.7 8/18/94

AVUAR
8.7

IDAHO DEPARTMENT OF HEALTH AND WELFARE

In the matter of:)
Potlatch Corporation --)
Avery Landing)

CONSENT ORDER
Idaho Code § 39-108

1. Pursuant to Idaho Code § 39-108 (Idaho Environmental Protection and Health Act), the Idaho Department of Health and Welfare, Division of Environmental Quality (Department) enters into this Consent Order with Potlatch Corporation (hereafter "Respondent").
2. Respondent is currently the owner of a property located near Avery, Idaho (hereafter "Property" and is more particularly described in Exhibit A hereto).
3. The Avery Landing site is adjacent to the St. Joe River. Petroleum products have been discovered in the ground water at the Avery Landing site and discharging from the site into the St. Joe River.
4. Potlatch has voluntarily prepared and the Department has approved a Remediation Plan that describes a free phase petroleum product recovery system. The Remediation Plan is attached hereto as Exhibit B and is incorporated herein as a part of this Consent Order. Respondent shall, to the extent that access to undertake the same exists or is granted, fully implement all aspects of the Remediation Plan by the dates set forth in the Remediation plan, and thereby shall:
 - A. Submit final plans and specifications regarding the recovery system as provided in the Remediation Plan;
 - B. Construct, operate and maintain the recovery system as provided in the Remediation Plan;
 - C. Conduct water level and product monitoring and submit the results to the Department as provided in the Remediation Plan. ~~Three day notification to the Department, prior to any sampling event, is required.~~
 - D. Submit by the dates and in the manner provided in the Remediation Plan, the following documents and information:



- (1) final plans and specifications, including a project implementation schedule, regarding the recovery system;
- (2) laboratory results and analysis of soils excavated during construction of the recovery system;
- (3) water level monitoring results and analysis of ground water flow direction prior to construction of system;
- (4) results of quarterly product and water level monitoring;
- (5) a report setting forth a capture zone analysis and an analysis of the effectiveness of the system submitted three (3) weeks after the first quarter of operation;
- (6) product thickness sampling results taken after the shutdown of the system to determine if recovery is complete; and
- (7) reports, submitted on an annual basis, beginning one year after the effective date of this Consent Order, that shall describe (i) the total amount of product recovered in that year and the destination of the product recovered, (ii) an analysis of the effectiveness of the recovery system, and (iii) a schedule for the next year's product and water level monitoring. The Department shall review the annual reports in terms of the effectiveness and continued practicality of the use of the recovery system, and in order to evaluate Respondent's compliance with this Consent Order. Based upon the reports, any party to this Consent Order may request, in writing, a modification of the approved Remediation Plan, which shall be promptly reviewed and acted upon by the Department. The Department shall also approve or require modification of the schedules for water level and product monitoring based upon information in the reports; and

E. ~~Continue to operate the recovery system pursuant to the Remediation Plan until the free product thickness as measured in all wells and the recovery trench is less than one tenth (0.1) inch.~~ After completion of recovery, the recovery system shall be shut down for a period of at least one (1) year. The Department shall notify the Respondent in writing regarding the length of the shutdown. If, at the end of the shutdown period, the

product thickness levels exceed one tenth (0.1) inch in any monitoring well or the recovery trench, Respondent shall restart the recovery system and operate it until the product thickness levels reach one tenth (0.1) inch or less in all monitoring wells and the recovery trench. Thereafter, the system shall be shut down, monitored and restarted as provided above.

After collecting at least two (2) years of recovery and monitoring data, and product thickness is greater than one tenth (0.1) inch, Respondent may propose an alternative recovery system shutdown criteria if free product recovery rate and thickness of product have shown an asymptotically decreasing rate over time. Upon Department approval of the alternative recovery system shutdown criteria, agreement with the Department that asymptotic levels have been reached, and discharge to the river is controlled by the recovery effort (no sheen on the water), Respondent may petition the Department for site closure. After reaching asymptotic levels, the recovery system shall be shut down for a period of at least one (1) year. The Department shall notify Respondent in writing regarding the length of shutdown. If at the end of the shutdown period the levels of product have changed from those considered asymptotic, Respondent shall restart the recovery system and operate it until levels are truly asymptotic. Should levels remain asymptotic, the closure of the site is dependent on the discharge from the site to the river. If a sheen is present on the river from petroleum seepage from the site following system shutdown, Respondent has the option of restarting the recovery system and/or installing product skimmer pumps in the recovery trench to control petroleum seepage. The Department agrees that skimmer pumps capturing the majority of the petroleum entering the recovery trench is a best management practice to control petroleum discharge to the river and other control measures will not be required. Once petroleum seepage is controlled by the skimmer pumps, Respondent may again petition the Department for closure after a one (1) year shutdown period. Any other methods to control discharge to the St. Joe River must be approved by the Department in writing and take place prior to the one (1) year shutdown period. Should petroleum seepage begin prior to the end of the one (1) year shutdown period, Respondent shall, as a best management practice, restart the skimmer pumps.

If the collected data establish that the 0.1 inch product thickness or alternative shutdown conditions are met, the Department understands and agrees that further operation

of the recovery system would not be justified and the site will be closed.

A flow chart to illustrate the pathway of possible site closure was developed on March 25, 1994 and is attached to this Consent Order.

5. Work undertaken pursuant to this Consent Order shall not deviate from the Department approved Remediation Plan without prior notification to and written approval by the Department.
6. Respondent shall be responsible for obtaining all required permits or agreements for the disposal or treatment of any contaminated material. The Department will provide assistance in identifying necessary permits and will expedite issuance of same. The Department will also take the lead in attempting to obtain right of entry for Respondent on the Federal Highway Administration right-of-way and the Theriault property as necessary to implement the Remediation Plan.
7. All monitoring wells shall be properly closed in accordance with Idaho Department of Water Resources regulations prior to termination of this Consent Order.
8. All communications required by this Consent Order shall be addressed to:

Gwen P. Burr, Regional Administrator
North Idaho Regional Office
Division of Environmental Quality
2110 Ironwood Parkway
Coeur d'Alene, Idaho 83814

Douglas M. Conde
Deputy Attorney General
Division of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

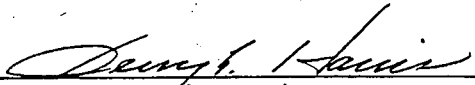
9. Respondent shall allow the Department access to the portions of the site it owns for remediation oversight and to take and/or split samples.
10. This Consent Order shall not in any way relieve Respondent from any obligation to comply with any provision of the Idaho Water Quality Standards and Wastewater Treatment Requirements or any other applicable local, state, or federal laws.
11. Subject to Respondent's compliance with the terms of this Consent Order, the Department agrees that full compliance with this Consent Order is a complete and final resolution of all

claims by the Department against a complying Respondent relating to the subjects covered by this Consent Order, and the Department hereby releases Respondent with respect to the above-mentioned claims.

12. Upon fulfilling the requirements of this Consent Order, Respondent may petition the Department in writing for a termination of this Consent Order. This Consent Order shall remain in full force and effect until the Department acknowledges in writing that the Consent Order is terminated and that Respondent has fulfilled all requirements of this Consent Order.
13. This Consent Order shall bind Respondent and its successors and assigns until terminated in writing by the Department as provided in paragraph 12.
14. The effective date of this Consent Order shall be the date of signature by all parties.

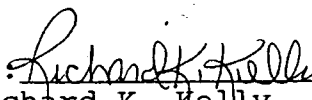
DATED this 16th day of August, 1994.

IDAHO DEPARTMENT OF HEALTH AND WELFARE

By: 
Jerry L. Harris, Director
Idaho Department of Health and Welfare

DATED this 18 day of August, 1994.

POTLATCH CORPORATION

By: 
Richard K. Kelly
Vice President, Western Wood Products Division
Potlatch Corporation

DESCRIPTION OF POTLATCH PROPERTY
AVERY, IDAHO

Part of Government Lot 1 of Section 16, Township 45 North, Range 5 East, Boise Meridian, Shoshone County, Idaho, located between the southerly boundary of FHWA Forest Highway 50 and the northerly bank of the St. Joe River.

EXHIBIT A

REMEDIATION PLAN FOR AVERY LANDING**A. THE SYSTEM**

The recovery system is designed to recover free phase petroleum product. A trench recovery system will be used to capture product currently moving into the St. Joe River, by depressing the ground water and intercepting the product along this flow path.

B. SYSTEM DESIGN

The design of the recovery system is described in the initial drawings attached hereto. The recovery system design may change depending on field conditions. The trench length will be at least 200 feet long in all cases. Within thirty (30) days after the effective date of the Consent Order regarding Avery Landing, final plans and specifications stamped by an Idaho registered, professional engineer shall be submitted to the Department for review and approval. The plans and specifications shall be revised until approved by the Department. The Department shall notify Potlatch and CMC, in writing, of its approval.

Prior to construction, Potlatch and CMC shall measure the water level in new and existing monitoring wells (the wells are described in paragraph D) and submit the results and an analysis of ground water flow direction to the Department. The Department shall review the submitted material to determine whether the location of the system is adequate to capture the contaminant plume. The Department shall notify Potlatch and CMC, in writing, whether the location of the system is adequate or should be changed.

C. CONSTRUCTION

Unless a different time is agreed to by the parties hereto, Potlatch and CMC shall begin construction of the recovery system in accordance with the project implementation schedule submitted with the plans and specifications.

Construction will involve exposure of contaminated material to the environment. All construction practices must be planned or field modified to minimize the release of contaminated materials to the environment. This includes not digging contaminated materials during periods when runoff is occurring to the St. Joe River from the excavation area. Precautions to control runoff from sudden storm events need to be taken.

Soil excavated during construction that is not used to backfill the recovery trench shall be treated and/or disposed of in accordance with applicable state and federal law. Potlatch and CMC shall analyze the excavated soil not used for

backfill, using composite sampling, for PCBs, semi-volatile organic compounds, metals and total petroleum hydrocarbons (TPH). The laboratory results and analysis shall be submitted to the Department within three (3) weeks after receipt by Potlatch and CMC. TPH levels shall be determined for every one hundred (100) cubic yards of soil. If the laboratory results and analysis shows that the excavated soil constitutes a hazardous waste, it must be handled according to applicable state and federal law. If the soil does not constitute a hazardous waste, but contains over 1000 mg/kg TPH, then the material shall be landfarmed, or otherwise treated or disposed of in a manner approved by the Department. If the soil contains TPH levels less than 1000 mg/kg, the Department shall not address its treatment or disposal. Within thirty (30) days of the submittal of the soil analysis to the Department, the Department shall notify Potlatch and CMC, in writing, regarding whether the soil constitutes a hazardous waste, or, if not a hazardous waste, whether it may be landfarmed. If landfarming contaminated soil at the site is approved by the Department, landfarming shall be carried out as follows:

1. Excavated soil must be stockpiled and covered, protecting the material from precipitation until seasonally warm weather.
2. Once warm weather occurs, the soil is spread in a layer not thicker than six (6) inches. (If contaminated soil is landfarmed off-site, an impermeable liner is required and the location must be approved by DEQ.)
3. The soil must be treated until the levels of TPH is measured at less than 1000 mg/kg. Sample locations may be determined by the Department at a later date (typically the Department requires one sample for every 100 cubic yards of soil). To prevent surface runoff, a minimum of one foot high berm shall be built around the landfarm using non-contaminated material, to prevent runoff of contaminated soil from reaching the river.

D. MONITORING

Two types of monitoring are required prior to and during operation: Water Level Monitoring, and Product Monitoring.

1. Water Level Monitoring - Water level monitoring will establish the presence of a ground water capture zone around the recovery trench. ~~Six existing wells will be used in this monitoring.~~ The existing wells are HC-1R, HC-2, HC-3, HC-4, MW-4, MW-5, and MW-11 as identified in the attached Hart Crowser Figure 1. Access for water level measurement in the recovery trench is required.

Monthly measurements of depth to water shall be made during the first quarter of operation. Quarterly measurements shall be made for the balance of the first year of operation. A water level measurement schedule for system life will be developed after review of the first year data. The schedule shall be submitted to the Department for review and approval, as part of an annual report. Potlatch and CMC shall submit a report including a capture zone analysis and an analysis on the effectiveness of the recovery system within three (3) weeks after the first three months of the operation of the system. A totalizing flow meter is required to record the volume of water pumped to the infiltration trench.

The Department shall review the first quarter report. If requested by the Department, based upon its review of the first quarter report, the recovery system shall be modified if necessary to create a capture zone encompassing the known contaminated area.

2. Product Monitoring - Monitoring of the product will be used to determine when the free phase recovery is complete and the use of the recovered product.

Product thickness will be measured in wells ~~HC-1R, HC-2, HC-3, HC-4, MW-4, MW-5, and MW-11A~~ or as agreed to by Potlatch, CMC, and the Department. Monthly measurements of product thickness shall be made during the first quarter of operation and quarterly measurements shall be done for the balance of the first year of operation. A product thickness measurement schedule for system life will be developed after review of the first year data. The schedule must be submitted to the Department for review and written approval, as part of an annual report.

A representative sample of the product must be analyzed and the analysis submitted to the Department, along with knowledge of process (source determination as understood by Potlatch and CMC), prior to initial disposal, to determine the status of the product as a hazardous waste. Testing shall be by toxicity characteristic leaching procedure (TCLP). The recovered product must be handled according to state and federal regulations.

The total amount of product recovered and final destination of the product will be reported to the Department on an annual basis, as part of an annual report.

3. **Monitoring Data** - Unless specified otherwise, all laboratory results, analysis and other data collected from the site will be forwarded to the Department within three (3) weeks of receipt by Potlatch and CMC.

E. **OPERATION AND MAINTENANCE CONSIDERATIONS**

Winter time operation of the recovery system could potentially be impossible in the harsh climate of Avery. Potlatch and CMC shall make a reasonable effort to operate the system year round but recognize weather limitations. Shutdowns of the system in extremely cold weather and/or deep snow are expected. In the event of winter shutdown, appropriate steps must be taken to stabilize the site.

Proper operation of the separation system between product and water is necessary. Free product should not be pumped into the infiltration trench. The infiltration trench itself should not overflow or be a hazard in any way. No discharges into the St. Joe River will be allowed from the system.

~~Any system failure or shutdown lasting more than two days shall be reported to the Department within two days of detection of such failure. Any discharge of free product into the environment by the system shall be reported to the Department within 24 hours of detection of such discharge.~~

~~Absorbant booms shall be installed to contain petroleum discharge from seeps along the river. These booms shall be in operation from June 1 to October 31, during active remediation.~~

F. **REPORTS**

Recovery completion and post-recovery monitoring will be conducted according to the provisions of the Consent Order.

The following reports and information, as outlined in this Remediation Plan, shall be submitted to the Department:

1. As provided in paragraph 6.B of the Consent Order, within thirty (30) days after the effective date of the Consent Order, final plans and specifications regarding the design of the system, including a project implementation schedule;
2. As provided in paragraph C, within three (3) weeks after receiving laboratory results, an analysis of the excavated soils not used to backfill the recovery trench;
3. As provided in paragraph D, within three (3) weeks of receipt by Potlatch and CMC, the results of quarterly

product and water level monitoring taken during the operation of the system;

4. As provided in paragraph D, three (3) weeks after the first three months of the operation of the system, a report setting forth a capture zone analysis and an analysis of the effectiveness of the system;
5. Product thickness sampling results taken after the shutdown of the system to determine if recovery is complete; and
6. On an annual basis, beginning one year after the effective date of the Consent Order, an annual report describing (i) the total amount of product recovered in that year and the destination of the product recovered; (ii) an analysis of the effectiveness of the system; and (iii) a schedule for the next year's product and water level monitoring. The Department shall review the annual reports in terms of the effectiveness and continued practicality of the use of the recovery system, and in order to evaluate Potlatch and CMC's compliance with the Consent Order. The Department shall also approve or require a modification of the water level and product monitoring schedules contained in the annual reports. Based upon the reports, any party to the Consent Order may request, in writing, a modification of this Remediation Plan.

Shut down Criteria Flow Chart Avery Landing Site March 25, 1994

